毛豆品種改良

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摘　要：本計畫目的育成大莢豐產、色澤及食味佳、著莢節位高、抗倒伏之品種供加工用，另外選育具有耐冷性、早熟、充實飽滿，且適合晚秋或早春栽培品種，以供鮮莢外銷用。本年度（1）88 年秋作雜交豆娘 × 高雄三號等 7 個組合，共獲得 F1 種子 99 粒，並於 89 年春作培育其 F_1 世代。（2）雜交後裔 F_2～F_4 世代採用混合法進行培育。F_5～F_7 世代選取優良單株 2,500 株，並從株行試驗之 3,198 個系統中，計選出 KVS1458 等 97 個品系參加 90 年度第一年品系試驗。（3）第一年品系試驗計有 100 個品系（種）參試，選出 25 個優良品系參加 90 年度第二年品系試驗。（4）第二年品系試驗計有 25 個品系參試，88 年秋作 A 組在參試 8 個品系中，合格莢產量以 KVS965 品系之 5,959 公斤及 KVS960 品系之 5,375 公斤表現最佳，較對照種高雄 2 號之 5,250 公斤分別增產 13.5%及 2.4%。B 組參試 8 個品系中，合格莢產量以 KVS1156 品系之 5,881 公斤及 KVS1063 品系之 5,575 公斤表現較佳，但較對照種高雄 2 號之 6,313 公斤分別減產 6.8%及 11.7%。C 組在參試 9 個品系中，合格莢產量僅有 KVS980 品系之 5,750 公斤較對照種高雄 2 號之 5,538 公斤增產 3.8%表現較佳。89 年春作 A 組在參試 8 個品系中，合格莢產量以 KVS1198 品系之 10,938 公斤及 KVS1194 品系之 9,988 公斤表現最佳，較對照種高雄 2 號之 7,634 公斤分別增產 43.3%及 30.8%。B 組參試 8 個品系中，合格莢產量以 KVS1269 品系之 11,175 公斤及 KVS1249 品系之 9,675 公斤表現較佳，較對照種高雄 2 號之 9,219 公斤分別增產 21.2%及 4.9%。C 組在參試 9 個品系中，合格莢產量以 KVS1306 品系之 11,683 公斤及及 KVS1312 品系之 11,383 公斤表現較佳，較對照種高雄 2 號之 7,619 公斤分別增產 53.3%及 49.4%。預定選出 5 個優良品系參加 90 年度區域試驗。（5）毛豆新品系第二年區域試驗有 KVS834 等 12 個品系（種）在全省 16 個地區參試，目前資料正在整理分析中。

Varietal Improvement of Vegetable Soybean

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Abstract: The purpose of vegetable soybean cross breeding is to develop new cultivars with large pod, high yield, good quality and high pod site that were suitable for export as frozen or fresh pod process and could adapt the stress in Taiwan. The experimental results were summarized as follow : (1) A total of 99 F_1 hybrid seeds were obtained from 7 cross combinations in the fall crop season of 1999, and were propagated F1 generation in the spring crop season of 2000. (2) In the propagation and selection trials, bulk method was applied to propagating F_2-F_4 segregative generations in the fall crop season of 1999 and the spring crop of 2000, respectively. A total of 2,500 superior single plants in F_5-F_7 generation were selected in the fall crop season of 1999 and the spring crop of 2000, respectively. In the plant-to-row trial, there were 97 fixed lines were selected depend on their performance in the fall crop season of 1999. (3) In the first year lines trial, there were 25 fixed lines were selected depend on their performance among 97 tested lines in the fall crop season of 1999. 4) The second year lines trial were separated three groups. KVS965 and KVS960 lines had higher qualified pod yield among 8 tested lines of A group, which were 13.5% and 12.4% higher than check variety, Kaohsiung 2 in the fall crop season of 1999, respectively. KVS1165 and KVS1063 lines had higher qualified pod yield among 8 tested lines of B group, which were 6.8% and 11.7% less than check variety, Kaohsiung 2 in the fall crop season of 1999, respectively. KVS980 line had higher qualified pod yield among 9 tested lines of C group, which was 3.8% higher than check variety, Kaohsiung 2 in the fall crop season of 1999. KVS1198 and KVS1194 lines had higher qualified pod yield among 8 tested lines of A group, which were 43.3% and 30.8% higher than check variety, Kaohsiung 2 in the spring crop season of 2000, respectively. (4) KVS1269 and KVS1249 lines had higher qualified pod yield among 8 tested lines of B group, which were 21.2% and 4.9% higher than check variety, Kaohsiung 2 in the spring crop season of 2000, respectively. KVS1306 and KVS1312 lines had higher qualified pod yield among 9 tested lines of C group, which were 53.3% and 49.4% higher than check variety, Kaohsiung 2 in the spring crop season of 2000, respectively. (5) In the second year lines regional trails, 12 lines were conducted at 16 locations during the fall crop season of 1999 to the summer crop season of 2000. The data of the regional trails is be analysed.